

September 2009

RB751S40 Schottky Barrier Diodes

Features

- Low Forward Voltage Drop
- Flat Lead, Surface Mount Device Under 0.70mm Height
- Extremely Small Outline Plastic Package SOD523F
- Moisture Level Sensitivity 1
- · Pb-free Version and RoHS Compliant
- · Matte Tin (Sn) Lead Finish
- Green Mold Compound



ELECTRICAL SYMBOL



SOD-523F Band Indicates Cathode RB751S40 Marking : 4B

Absolute Maximum Ratings * $T_A=25$ °C unless otherwise noted

Symbol	Parameter	Value	Units	
V_{RRM}	Maximum Repetitive Reverse Voltage	40	V	
I _{F(AV)}	Average Rectified Forward Current	30	mA	
I _{FSM}	Non-Repetitive Peak Forward Current	500	mA	
T _J	Operating Junction Temperature Range	-55 to +125	°C	
T _{STG}	Storage Temperature Range	-55 to +125	°C	

^{*} These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

Thermal Characteristics

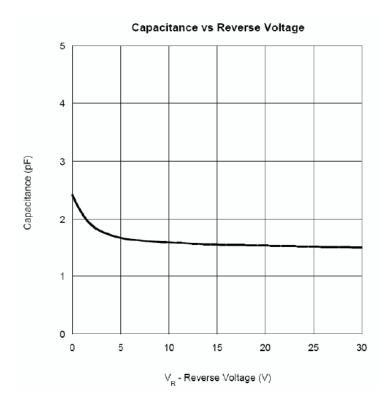
Symbol	Parameter	Value	Units
P_{D}	Total Device Dissipation (T _C =25°C)	200	mW
$R_{ hetaJA}$	Thermal Resistance, Junction to Ambient	500	°C/W

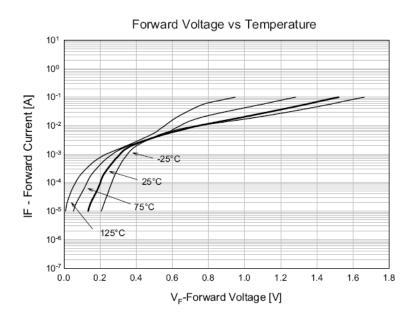
^{*} Device mounted on FR-4 PCB minimum land pad.

Electrical Characteristics T_A=25°C unless otherwise noted

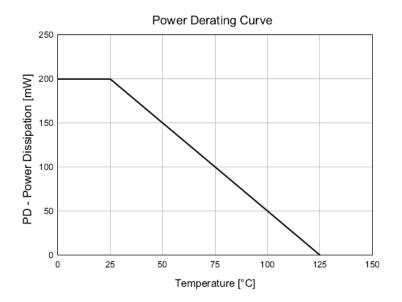
Symbol	Parameter	Test Condition	Min.	Тур.	Max.	Units
BV _R	Breakdown Voltage	I _R =10μA	30			V
I _R	Reverse Leakage Current	V _R =30V			0.5	μА
V _F	Forward Voltage	I _F =1mA			0.37	V

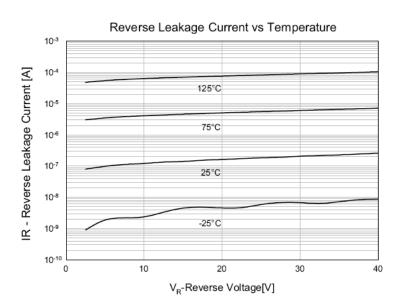
Typical Performance Characteristics





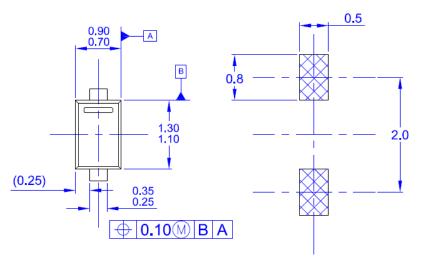
Typical Performance Characteristics (Continue)



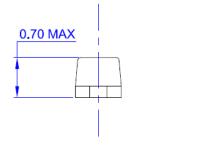


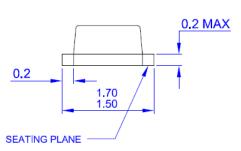
Physical Dimension

SOD-523F



LAND PATTERN RECOMMENDATION





NOTES: UNLESS OTHERWISE SPECIFIED

- A) PACKAGE REFERENCE: THIS PACKAGE OUTLINE CONFORMS TO JEITA SC-79.
- B) ALL DIMENSIONS ARE IN MILLIMETERS.

- C) DRAWING CONFORMS TO ASME Y14,5M 1994
 D) DIMENSIONS ARE EXCLUSIVE OF BURRS, MOLD FLASH, AND TIE BAR EXTRUSIONS.
 E) LANDPATTERN RECOMMENDATION IS BASED ON IPC7351A STANDARD SOD1609X65M,
- F) DRAWING NUMBER AND REVISION:MKT-SOD523F1rev1





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Definition of Terms				
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